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Will we ever learn?

The phenomenon of human-caused mass-extinction was not set in motion by cruelty, greed or thoughtlessness.

The first humans did not know that they were doing it.

The incongruence is that humans still lack the consciousness required to control their impact on the natural world!

With the current degree of technological evolution, it also seems quite irrelevant

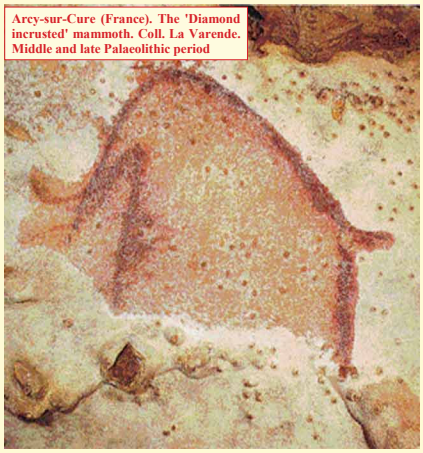
whether or not this impact will turn out to be an unstoppable and inevitable process ....

Technological evolution is as complex as hominid life itself. Development dawdled along for the first 80/90 % of its history before a dramatic acceleration by the end of the Pleistocene. For *too much* time, it led to conclude that 'advanced' abilities were all acquired less than 50,000 years ago in a 'Great Leap Forward' or 'Human Revolution', after the appearance of *Homo sapiens*.

"Why Dug! I haven't seen you in years! You haven't evolved a bit!

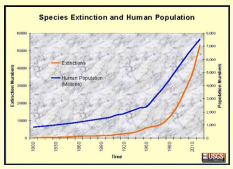
A different concept of human ecological history begins with the currently unfashionable fact that 1.4 million years ago the technological capabilities of *Homo erectus* had already become formidable enough to cause the extinction of several big animal species in Africa and South Asia.

"The growth of those technological capabilities did accelerate toward the end of the Pleistocene, enabling the ***Homo sapiens*** to enter Australia, Northern Eurasia, and the New World, encountering and exterminating many species which had not – in contrast with the big animals of Africa and South Asia – had the opportunity to develop a measure of resistance against the growing ingenuity of the hominid family." (Edmeades, 2006).



Arcy-sur-Cure (France). The 'Diamond incrusted' mammoth. Coll. La Varende. Middle and late Palaeolithic period

Extinction of big game animals



Class	Destruction of habitat		Over-hunting		Displaced by invading species		Lack of food		Killed as pests		Occasional hunting	
	No. of species	%	No. of species	%	No. of species	%	No. of species	%	No. of species	%	No. of species	%
Fish	107		19		64		2		-		1	
Amphibia	27		10		5		1		-		-	
Reptile	40		47		13		1		2		4	
Bird	103		53		49		1		2		-	
Mammal	153		121		14		20		17		7	
Total	449	67	250	37	127	19	25	4	21	3	12	2

Note: Total % is calculated as: Total No. of species on the verge of extinction = 100 / No. of species threatened by a specific factor

Because some species are threatened by more than one factor, the total percentage is over 100

Many kinds of now-extinct big animals lived in Europe and in *all* the earth's continents except Antarctica until about 14000 years ago.

These animals existed so recently that their bones barely deserve to be termed fossils. They are often augmented by flesh, skin, hair and faeces.

The fact that those animals disappeared relatively soon after our own species settled in the area in which they lived, raises strong suspicions that *Homo sapiens* were responsible for those disappearances.

"**Of course human beings were responsible!**" (Asimov, 1987)

Plaster, agriculture and fuel in the ancient Near East

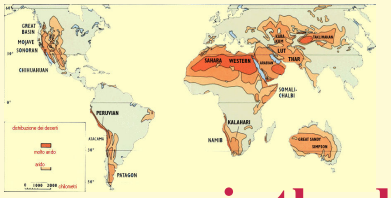
Plastered floors and walls were among the most common features of the early Pre-Pottery Neolithic cultures in the Near East. Their mixed 'hunting-farming-herding' economic strategy was basically a short-term benefit. **The intensive exploitation of the available resources led to the rapid decline of ecological balance, particularly in the Levant.**

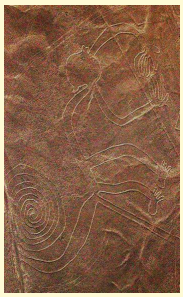
Figure 1. Geographical distribution of lime plaster and gypsum plaster in the Pre-Pottery Neolithic.

Plasters Hearths	Date (BC)	Plaster Type	Sites per Structure
Hayonim Cave	10500-9500	calcined lime	
Cayonu Tepesi	ca. 9000	lime	1.8
Ashik Hoyuk	ca. 7000	lime	
Nahal Ein Mallaha	10500-9500	calcined lime	
Yiftahel	before 6000	lime	7, and 1.4 (2 floors)
Coral Hoyuk	6500	lime	
Hacilar	before 6000	lime	
Tell Ramad	6500	lime	
Byblos	before 6000	lime + rocks	
Ain Ghazal	before 6000	lime	3.3
Jericho	6500	lime	0.43
Ali Kosh	6500-6000	gypsum	
Aswa	before 6000	lime	

Plaster samples from a range of PPN sites have been analysed by Gourdin and Kingery. By the lime content in the samples, an astonishing amount of chalk and wood was estimated to be used in plastering.

Technological factors strongly support the idea that a natural climate change in the Near East was not necessary occurring (according to Bar-Yosef and Moore), in line with the outcomes of the paleobotanical study led by van Zeist.





The environmental impacts of agriculture on the Nasca civilization of Peru

The Nasca, best known for the Nasca Lines in the Peruvian deserts, lived between about 450 BC - 750 AD, when their society collapsed into chaos.

Recent studies show that the Nasca cleared the Ica Valley forest of Huarango trees to make way for crops, cotton and maize.

Beresford-Jones reports that **cutting down the Huarango tree damaged soil fertility and made the Nasca vulnerable to El Nino-style storms and ultimately put an end to Nasca society**.

.... the real question now is:

is the destructive impact of our species still reversible?

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